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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/607,193  | 06/27/2003  | Lev Ryzhikov         | 1857.0910001        | 5795             |
| 26111   | 7590        | 04/19/2005           | EXAMINER            |                  |
| STERNE, KESSLER, GOLDSTEIN & FOX PLLC<br>1100 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | PRITCHETT, JOSHUA L |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2872                |                  |

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/607,193

**Applicant(s)**

RYZHIKOV ET AL.

**Examiner**

Joshua L. Pritchett

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This action is in response to Amendment filed February 1, 2005. Claims 1-17 have been cancelled and claims 18-28 have been added as requested by the applicant.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 19 and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz (WO 98/28644) in view of Fujimoto (US 2003/0053218). For text citations patent Schultz (US 6,366,410), which is a national stage of the PCT that WO 98/28644, is used as a translation while the WIPO document is being translated.

Regarding claim 18, Schultz teaches a first lens group (100) consisting of three lenses (Fig. 1); a second lens group (200) having at least one lens (Fig. 1) and a third lens group (300). Schultz teaches an aperture stop (8) positioned between the first and second lens groups (Fig. 1;

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col. 2 line 67) and a fold mirror (14) positioned between the second and third lens groups (Figs. 1 and 2; col. 3 lines 7-8). Schultz lacks specific reference to the third lens group containing only one lens. Fujimoto teaches the use of a third lens group containing a single cemented lens (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Schultz invention include the cemented lens as taught by Fujimoto for the purpose of reducing the size of the system by cementing the lenses in the third lens group together, thus forming a single lens and reducing the space occupied by the third lens group.

Regarding claim 19, Schultz teaches the second lens group consists of two lenses (Fig. 1).

Regarding claim 21, Schultz teaches one of the lenses in the first lens group is a meniscus lens (Fig. 1).

Regarding claim 22, Schultz teaches two of the three lenses in the first lens group of biconvex lenses (Fig. 1).

Regarding claim 23, Schultz teaches one of the two biconvex lenses has an aspherical surface (col. 3 lines 3-5).

Regarding claim 24, Schultz teaches at least one lens in the second lens group has an aspherical surface (col. 3 lines 3-5).

Regarding claim 25, Schultz teaches at least one lens in the second lens group has at least one convex surface (Fig. 1).

Regarding claim 26, Schultz teaches the single lens in the third lens group comprises two spherical surfaces (col. 3 lines 3-5). Lenses in the art are assumed to be spherical unless otherwise indicated. There is no indication in the Schultz reference that either surface (15 or 16) are aspherical.

Regarding claim 27, Schultz disclose the first lens group forms a front part of a lens relay; the second lens group forms an intermediate part of a lens relay and the third lens group forms a field part of a lens relay (col. 2 line 64 – col. 3 line 8).

Regarding claim 28, Schultz teaches a light source (50) positioned before the first, second and third lens groups (Fig. 2); and a pattern generator (330) positioned after the third lens group (Fig. 2).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz (WO 98/28644) in view of Fujimoto as applied to claim 18 above, further in view of Schultz (US 2002/0036832).

Schultz '644 in combination with Fujimoto teaches the invention as claimed but lacks reference to the use of three lenses in the second lens group. Schultz '832 teaches the use of a second lens group (705) with three lenses (Fig. 7). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Schultz '644 invention include three lenses in the second group as taught by Schultz '832 for the purpose of more precisely relaying the incident light to the pattern generator.

### ***Response to Arguments***

Applicant's arguments, see Amendment, filed February 1, 2005, with respect to the rejection(s) of claim(s) 18-28 under Takahashi have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration of the newly

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presented claims, a new ground(s) of rejection is made in view of Schultz. Applicant argued that the Takahashi reference included more lenses than claimed in the current application and that the use of the close-ended phrases "consisting of" requires that the reference have the same number of lenses. A new rejection was made in view of Schultz that meets the claim limitations.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP



**DREW A. DUNN**  
**SUPERVISORY PATENT EXAMINER**